

THE NEON NEWS

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MORE THAN MEETS THE EYE

NUMBER 5

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TUBES TAKE OFF

Matt Thompson of Kaneohe, Hawaii, has appeared in *The Neon News* as both a cartoonist and photographer's model (cover shot, issue #1). Now the maestro of neon kite-flying explains how he became a pioneering entrepreneur at the tender age of 23:

Matt: It started approximately seven months ago. We started out with long — probably 36" — tubes.

NN: What kind of tubes, and what kind of kite?

MT: Then we were using a small stunt kite, which was the *GO FLY A KITE* 2200cc model. This proved to be a well-handling kite with these large tubes, but we couldn't get the tubes to last very long, because of breakage every time we'd crash, and because of the battery. They weren't holding out very long, maxing out our Tech 2000 transformers.

NN: You were using a 12-volt transformer?

MT: Yeah, with a 9-volt battery.

NN: What did the first ones with the long tubes look like?

MT: Oh, it looked quite amazing.

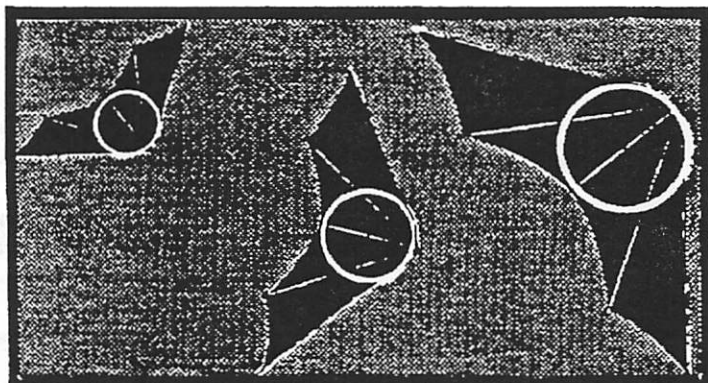
NN: What colors were the tubes?

MT: It was an ultra-blue and a veep green. It was quite a spectacular sight. It was a completely black sky, and moving at approximately 60 miles per hour, doing pinpoint maneuvering. It was quite a sky show. You can have all sorts of tracer effects, depending on the wind. Sometimes the wind was too strong, and caused us to crash rather hard into the ground, shattering the glass and the kites, actually. At first our problem was that we were destroying the kites as fast as we were destroying the neon.

NN: Did it affect the way they handled, having that weight on them?

MT: Actually it did hamper it a bit. It hampered the controlling a little bit because of the weight, but not too bad because the things are so powerful. Our total setup was just about 15 ounces for the tubes and the transformer and the battery. And these things have such a powerful thrust behind them that they were still pulling us — when the gusts would come up you'd be yanked five, ten feet along.

...on a kite at 60 mph



NN: Were there other people kiting when you were doing these?

MT: Not in the beginning. We were doing this at Kualoa park, late-night experiments. Top-secret kite runs.

NN: No drunken revelers to cheer you on?

MT: Just us, the Budweiser flying team. And then we went from long tubes, to bigger kites and smaller tubes.

NN: What diameter were the first tubes?

MT: We were using 12mm. Professor Schleisner (another Oahu colleague) came into the kite flying array, and he came up with some good mounting techniques, such as velcro.

NN: How did you attach the first ones?

MT: Tape. Black electrical tape.

NN: Did you attach it to the struts of the kite?

MT: It was connected to the upper and the lower spars. Then the velcro proved to be good for a while, but the stickiness wore off the adhesive. And then the clear acrylic came in; we were encasing them in clear acrylic tubing, the rigid kind. That seemed to work pretty good but we couldn't find the true strength we were looking for.

So after numerous crashes, and many, many tubes, we went

(see Kites, page 8)

Bound for glory: The brightest shop names

Naming your new shop? Wondering what else is out there? Here are some choice examples from our mailing list database, in case you're tired (Neon Yawn) of the usual Ace, Acme, AAA, Quality, Rainbow, American, Custom, Signcraft and Neon Designs among us. Full of air, there's:

Rare Gas Neon Co. (Milwaukee)
Gas'n'Glass Neon (Ridgefield WA)
Krypton Neon (Long Island NY)
Argon Neon (Benicia, CA)
The Gas Co. (Cabin John, MD)
Glass & Gas Graphics (Sidney, Australia)

Of the sixties?:

Flower Town Neon (Toronto)
Paisley Neon Glasswork (Phoenix)

Up all night:

After Hours Neon (Oklahoma City)
Nite Writers (Denver)
Nights of Neon, Inc. (North Hollywood)
Dusk to Dawn Electrical (Edmonton, Alta)

Full of radiant light:

Atomic Signs (Farmington, NM)
Six Mile Neon (Green Cove Springs, FL)
Sun Fire Neon (Arvada, CO)

Longest:

Flechtroneonics (Van Nuys, CA)

Variations on the ubiquitous "Rainbow Neon":

Prism Neon Ltd (Pt. Coquitlam, BC)
Radiance Neon. (Chicago)
Color It Neon (Wheatfield, IN)

No shit:

Business Neon (Los Angeles)
Neon Neon (Providence, RI and San Francisco)

We Do Neon, Inc. (New York)
A Neon Shop (N. Hollywood, CA)
It's Neon (Tucson, AZ)

Of space and time:

Neon & Beyond (Bristol, CT)
Neon Nebula, Inc. (Dallas)
Neon for Eons (Santa Monica, CA)
Neon-n-on (Ottawa, QB)
Planet Neon (Novi, MI)
Planet Neon Trust (Two Rivers, WI)
Light & Space Neon Design (Chicago)

Electric landscapes:

Neon Over Miami (Miami Lakes, FL)
Neon Beach (Seattle)
Glass City Neon (Toledo, OH)
Tide Water Neon (Virginia Beach, VA)

Neon spoken here:

Heirotglyphics Neon + Light (Chicago)
Neonically Speaking (Albany)
Howdy Neon (Kealahou, HI)

For the cynical:

Urban Clutter Neon Co (Ignacio, CA)
Neon Graffiti (Minneapolis and NY)

You meet the brightest people:

Lights Alive (Clovis, CA)

Lu-Mi-Nus Signs Co. (Chicago)
Lightadot Neon Works (Minneapolis)
Light Benders (New Orleans)
Light Fantastic Neon (Jacksonville, FL)
Light'n Up Neon (Washington DC)
Name In Lights Neon (Beaverton, OR)

If I don't mind saying so myself:

Enlightened Neon (Largo, FL)
Dr. Neon (Austin, TX)
Mr. Neon (Sacto, CA)
The Neon Man (Toledo, OH)
Ultra Neon (Jupiter, FL)

Categories unto themselves:

Abracadabra Neon Signs (Miami)
Mostly Neon (Elizabeth, NJ)
Attracta Sign (Richfield, MN)
Bein' Neon — Neon Images, Inc. (Westbury NY)
Bee Seen Signs (Columbia, MO)
D-sign, Inc. (Lowell, AR)
Lamp Lighter Neon (Artesia, CA)
Fishtail Neon (Chicago)
Jim Did It Sign Co. (Boston)
Neon & Nostalgia (Columbus, OH)
Major Installations Electrical (Anaheim)
Glasswerks (Las Vegas)
House of Neon (Ft. Pierce, FL)
In Neon (Portland), In-Neon (LA)
Renaissance Neon (Lancaster, CA)
Signs "R" Uss (South Easton, MA)
Scientific Signs, Inc. (Tucson)

(See Names, page 7)

Dear veterans and new recruits,

With a year's worth of issues and the bouncing baby (Lionel Hugh, on August 21) both delivered, we are proud and relieved — never mind the sour sages who tell us that "the real work starts now."

However, the real verdict is coming in now, in the form of resubscription responses. The publishing pros tell us that unless half of you resubscribe, we should call the whole thing off, because the newsletter will never get into the black.

But we aren't going to call it off; it's too much fun. We ARE trying to show the newsletter to more people, via cheap ads in the trade journals and, possibly, some distribution through sign supply shops. So if you see any copies in such spots, put in a good word for us!

And please pass your copies around and help flush out new recruits; if they subscribe (and mention your name), we'll extend your sub too. (If you're a subscriber AND you sent us a name AND they subscribed, you'll see that little number on your mailing label, the one on the upper right, go up one. That number indicates the last issue of your subscription.)

Tell us how we can keep on tickling your fancy. We are reprinting the most quotable survey responses in this issue — now that one Texan has cancelled his sub because of crude language, we feel even freer to publish your uncut comments! You can even fax us now, if your machine is type-2 compatible (that's the ancient, slow kind). Or send any IBM 360K/5.25" disk (ditto our computer: cheap and slow).

Our friend Dave, who graciously prints this out for us on his fast-and-fancy setup back in Minnesota, advised us the other day that "You can either market yourself as a Chevy Nova or a BMW."

Well, we're still committed to being the Volkswagen of sign trade journals: cheap, funky, and fun. We have a little rust to show for our hard-won experience, but who wouldn't, living far from the fast lane on a rutted road in a rain forest on a rock in the ocean?

Cheers,

Fred + Val

ANOTHER JOB FROM HELL

Mystery glitch traumatizes Tinseltown pro

You'll never work in this town again!

(Another Job From Hell, with suggestions for a heavenly solution)

By Richard John Jenkins

Part 1: The Problem

HOLLYWOOD, Ca. — The actress dances across the rain- and neon-streaked boulevard in tight jeans.

"Pop!"

She stops in the middle of the street and coyly stares into the camera.

"Pop, pop!"

Suddenly, a dazzling, flashing Las Vegas-style neon sign drops down in back of her. She jumps back in mock surprise, turns, faces the camera and says "Las Vegas! See you soon, high roller!"

The director yells, "And cut!"

"Pop, pop, pop!"

"You're about to hold up camera!" screams the producer.

Fifty-five production people on the Hollywood sound stage freeze and stare at the producer in total horror: Who is about to commit the ultimate crime in the film industry? Caterers, grips, sound technicians, carpenters, prop workers, script supervisors, painters, camera operators, electricians, actors all stare at each other, wondering "Who is about to NEVER WORK IN THIS TOWN AGAIN?"

The producer screams **"MR. NEON!"**

All eyes stare at me as I frantically run out from behind a row of prop slot machines for the twenty-fifth time, followed by two production assistants cursing me under their breath, carrying boxes full of 7-watt light bulbs.

Sweat pouring down my face, my heart about to burst, I quickly slam the ladder down in front of the hundreds of bulbs covering the sign and start changing the burnt-out ones again. **"Pop!"** goes another one.

The heat from the bulbs burns my fingertips. I try not to think about the pain. Instead I worry uncontrollably.

"Holding up camera" in the film industry means every wasted minute the camera isn't rolling will cost the production company around \$10,000. And I, nicknamed **"Mr. Neon"** by the crew, am close to committing this unthinkable crime.

For some unknown reason, every time the 12mm ruby red neon-pumped tubes flash on and off, the 7-watt light bulbs nearby burst with a **"Pop!"** In all my years of creating neon for motion pictures, rock videos and corporate theater, teaching neon design to thousands and even co-founding a neon museum, I have never run into this problem before.

Everything in the shop checked out fine before we delivered the sign. The high-voltage animators, primary flashers, the wiring, mounting — perfect. Never did I think

the hundreds of little white bulbs covering the sign that an outside vendor installed would cause such terror. **"Pop!"**

"Lunch!" yells the production manager. Suddenly cast and crew scurry out of the sound stage as wind machines die, — lights in fake buildings shut off, rain stops, fog disappears and classic cars come to a stop.

The sign in front of me suddenly goes out too. Both production assistants jump off their ladders, abandoning me for the lunch wagon.

"MAKE SURE THIS DAMN THING IS FIXED IN 45 MINUTES OR ELSE!" I quickly turn and see barely controlled rage in the producer's eyes as he storms off the set, slamming the door behind him.

Panic! 45 minutes to solve a neon/lighting problem I've

Sweat pouring down my face, my heart about to burst, I quickly slam the ladder down in front of the hundreds of bulbs covering the sign and start changing the burnt-out ones again. I try not to think about the pain. Instead I worry uncontrollably. I have 45 minutes in this dark, scary make-believe Las Vegas set to try and keep my reputation from going down the drain.

never even heard of! 45 minutes in this dark, scary make-believe Las Vegas set by myself to try and keep my reputation from going down the drain! And I'm supposed to be an expert! Who do I turn to? Who can get me out of this mess, and fast?

I frantically call **EVERYONE** in my neon world here in L.A. And guess what? No one has ever had anything like this happen to them, nor have they heard anything about it. At wit's end, I even call the light bulb company. No help.

So I changed sixty more bulbs and thought about where I would be moving to — since I wouldn't be working in this town again.

...But after the thirty-second take, they called it a wrap. I drove home exhausted, with bandaged fingertips.

Last I heard, they trashed the \$13,000 sign. I was told the commercial looked great and the sign will be seen by four million people for two seconds in the middle of a game show. (I never did find out which game show. Oh well.)

I'm still working in this town, but not for them. And my fingers have healed, finally.

But I still haven't figured out what went wrong. In retrospect, I feel that if I had known the right person to call, I could have repaired the problem I encountered on the spot.

(see Jenkins, page 10)

Suppliers and other unexpected allies

Another "unusual sources" catalogue, this one recommended by both Russ Garens and Brad Jirka of Minneapolis, is Lindsay's Electrical Books, from Lindsay Publications Inc., PO Box 12, Bradley IL 60915; (815) 468-3668

This is a catalogue of mostly pre-World War II reprinted books, presented with a "gee-whiz, I-can-build-a-death-ray-machine" tone... There are some useful books for neon folks, such as the 1935 "Neon Signs," by Miller and Fink, \$12.95 (see adjacent article). Also notable:

HOW TO RUN THREE-PHASE MOTORS ON SINGLE-PHASE POWER, \$3.00. For when you find that nice Vortex blower in an electrical junkyard, works perfect, price \$50, only it's three-phase and you neither have three-phase nor hope to ever get it (this is a true story).

Books on high voltage, from **HOW TO BUILD A 40,000-VOLT INDUCTION COIL** (similar to the unit described in Neon News #1) to ten books about Nicola Tesla & building Tesla coils, and other big-spark toys for electrical deviants.

Susan Steinberg of Savage Neon wants to know "Where and how to buy small quantities of *exotic* glass (i.e. Masonlite brilliant orange, UV, black glass UV, EGL chartreuse, Voltarc Lunar White, Portland orange... Us artists are starving for the *exotic* colors and don't want to fork over a whole lot of cash to buy a minimum of 100 pounds! Is there a glass co-op? Can we generate enough interest to form one?"

Ted Pirsig (your editor) wants to pursue this idea, and so what the heck — we'll act as a glass-depot switchboard until someone else would like to take over. Call or write, stating either what you want and how much you want, or what you have and are willing to divvy-up. Also, if you know of regular distributors willing to traffick in such niggling quantities, let us know about them too. (Myself, I'd like to find small quantities of EGL coral pink in 10 and 12mm — a nice hot pink when pumped with argon — and none of the many distributors I called would break a box, and even EGL themselves couldn't help me find one.)

Worth noting here is that Neon Sign Supply of Minnesota, an N. Glantz & Son distributor, will provide FMS ("Brillite" brand) glass in small quantities, all colors and sizes. This means that yes, you can get just two pounds of

Frog Green in 10mm, and yes, they're used to shipping elsewhere. Call them at (612) 544-5929, fax 544-5914, or write them at 8824 7th Ave., Golden Valley MN 55427. FMS may be contacted (to ask for a color-sample pack) at 8635 Harriet Ave. S, Minneapolis MN 55420, (612) 888-7976, fax 888-7978.

The aforementioned Susan also seeks leads on "Rechargeable transformers/power sources for transformers — like in the Masonlite display case (source and price info).

(see Suppliers, page 5)

1935 was a very good year

Step back in time to the 1935 edition of NEON SIGNS by Miller & Fink, \$12.95, from Lindsay Publications.

This is an early version of what became NEON TECHNIQUES AND HANDLING, and there are some interesting differences. You'd expect that irrelevant data would be dropped and new technologies would be included, which is mostly the case, such as no mention then of fluorescent coatings or cold cathode tubes. There are also some hilarious-looking electrodes, a bench set up with three ribbon burners (6", 12" and 18") and of course that 1930s streamlined look to the transformers.

What you don't expect, holding both the 1935 and 1985 versions side-by-side, is the good stuff left out of the later version.

Like a nice photo of a high-frequency electrode heater in use, among other long-lost drawings and photos. And in particular, two whole chapters that were dropped. "Special Applications of Luminous Tubes" is perhaps mainly of historical and esoteric interest, with items like Mazda bulbs, strobe lights and neon fuses. But the "Tricks of the Trade" chapter is a goldmine, with such items as building a simple "rare gas purifier" (will actually remove impurities from contaminated gas) and a "viewing glass" for neon tubes that will show impurities even though the color is red.

And — surprise! — in these ancient pages is the answer to Richard Jenkins' question about light bulbs next to neon (see elsewhere in this issue).

From page 252: "When luminous tubing is used in conjunction with electric light (incandescent) bulbs, on the same sign, the tubing must be placed at least 3 inches away from the nearest bulb. Otherwise, the high-voltage field surrounding the tube will cause the filament in the bulb to vibrate 120 times per second, so that the filament will break in a very short time."

Most text, photos and drawings are the same in both versions, but with enough added technical information in the new version that you wouldn't want to rely solely on the old one.

In short, look at this book as a supplement to (not a replacement for) Neon Techniques and Handling, at half the price of the new version.

Peter Mason on pumps and 'matters NEON'

Curious as to what Peter Mason (of England's Masonlite, supplier of fine high-tech equipment and supplies) would say in response to Mark Snyder's article on pumps, we asked him for some feedback. He graciously sent us the following letter:

Mr. Snyder's article shows a great deal of common sense and his advice in the main is good and is certainly necessary in our industry. I am always astonished to see what little real knowledge of the subject the average bender/pumper has. He certainly has his practical technique, but if anything should go wrong he is often at a loss as Mr. Snyder has found.

Where I would differ from Mr. Snyder is on two points only: 1) The cleaning of pump oil in roughing pumps, and 2) the use of turbomolecular pumps/secondary pumps.

1. Pump oil is a special low vapour pressure oil, designed to absorb only traces of water vapour the majority of which remains as vapour and is exhausted along with other gases such as CO₂ released from electrodes and glass.

Modern pumps are fitted with a gas ballasting valve. This allows atmospheric air to be passed through the rotary pump at some convenient time in the day for a short period to sweep out any traces of water and other vapours in the pump, thus overcoming the risk mentioned by Mr. Snyder.

2. Secondary pumps. There is no doubt that a secondary pump is necessary in order to achieve a vacuum good enough to ensure long-life neon tubes or cold cathode lamps.

In my long experience few if any rotary pumps can achieve much better than 10⁻² torr at the point where the neon tube is sealed on to the manifold.

Most good secondary pumps will improve this to 10⁻⁴ torr which is sufficient for our purposes.

In England we have not used glass diffusion pumps since the 1940s. Whether it was availability or fragility which ruled them out I can't say, but when my company began to make bombarding and pumping units for sale in the 1950s we used a single stage rotary oil pump backing a 3-stage mercury

vapour pump. In some cases we fitted oil diffusion pumps instead of mercury, although these were not popular until "mercury" became a dirty word!

Since the last 6 years or so we have used only turbomolecular pumps, and for several reasons:

a) They achieve that much better high vacuum very quickly.

b) They require no cooling water — often a problem in hot countries.

c) They need no fluid, e.g. mercury or silicone oil, to be topped up or changed.

d) They can be mounted in any position.

Our own workshop has used turbos without problems for 6 years. Perhaps it is the way we build our systems. We place the turbo in series in the main vacuum line between roughing pump and neon tube. The roughing pump (10⁻² torr) is running all day and we do our bombarding, i.e. outgassing electrodes and glass, on this pump only, the turbo being stationary. When outgassing is complete we switch on the turbo and in 45 seconds the vacuum has improved to around 10⁻⁴ torr. The turbo is allowed to pump for up to 2 minutes, then is switched off, and the main vacuum stopcock or valve closed. Gas filling completes the process.

Turbo pumps are more expensive, but give excellent results and if used as instructed give no trouble. I enclose an expanded drawing of one showing the 3 protective screens and the 9 sets of rotors and stators.

I would be pleased to correspond with "The Neon News" or any of your readers who wish to write to me on matters NEON.

Editors' note: Mr. Mason also mentioned that his firm's five-month-long British School of Neon Ltd. course ensures that students "understand what is going on in the tube and in the equipment during pumping."

(Suppliers, from page 4)

Also 5mm electrodes, etc. Silver stamping paste (Masonlite product) — can't find it anywhere."

Editor's note: Tech 2000 (5631 J Palmer Way, Carlsbad, CA, 92008, (619) 431-7144, fax 431-5271) has a variety of tiny, 12-volt transformers (\$30- \$45), and these seem to be quite reliable. They can be run on 9-volt radio batteries, or any combination of batteries with an output of 7.5 to 15 volts. Rechargeable batteries could then be used, with a portable/rechargeable neon display resulting. Anyone who's used other 12-volt units, please write us to let us know what you think of 'em.

And while we're rattling off suppliers' names: The best prices I've seen for Neon Dynamics transformers are at Max Marketing, 19807 Sussex Dr., St. Clair Shores, MI, 48081. (313) 773-5000, fax 772-6224. They are an authorized

distributor that ships nationwide, and claim to have a huge inventory.

(As an additional note on solid-state transformers, Richard Jenkins mentioned that a sign company he was familiar with had a lot of problems with their units doing fine in the shop and then poorly at the site. Then they did their in-shop load testing with the full amount of GTO wire that would be used on the final installation and the problems went away.)

Finally, another cheap source (that is, un-ridiculously marked up) for bombarding milliammeters. Call or write Simpson Electric Co., Elgin, IL 60120 (708) 697-2260. Ask for the nearest distributor, and then contact them, asking for a panel-mount meter, model #2154 (AC ammeter, 0-1.0 amp, 25 kilovolt). Our local Simpson distributor quoted us \$55 total — and this is the very same gauge that your unwitting editor bought from a neon Supply house for \$140.

Mad hatters, Minamata and mercury hazards

Modern photojournalism ensures that everybody has some horrific image that sticks in their minds. One of the most startling is W. Eugene Smith's famous photograph of a young mercury poisoning victim in Minamata, Japan, being gently bathed by her mother. Poisoned by industrial pollution before birth, the daughter's hands are stretched and twisted, her face contorted, her eyes unseeing.

We are reprinting this excerpt from "How Poisonous is Mercury?" (from Bethlehem Apparatus Co., Hellertown PA) because many benders don't know how serious mercury poisoning is, and how easily overlooked stray mercury is in the average shop.

It's fun to play with — Val remembers breaking thermometers to play with the quicksilver droplets — and it's hard to clean up. And once it settles into table cracks and between floor tiles, it vaporizes. Therein lies the danger: long-term exposure to even tiny quantities can cause permanent injury.

As an occupational hazard, mercury has long been famous as what made "mad hatters" insane: the chemicals used in felt processing caused "mercurialism" in the hat industry. The symptoms made poisoning victims easy targets of ridicule, including "excessive flow of saliva, vomiting, separation of teeth from gums and loss of teeth, diarrhea, and violent tremor. The more vague symptoms include forgetfulness, a strong disinclination to work(!), mental fatigue, irritability, excitability, loss of appetite, the need for an unusual amount of dental work."

The Bethlehem safety instructions include "good ventilation. Store all mercury in tight containers or under water.

"Where mercury spillage occurs, immediately flood the areas with water, wear rubber boots, remove the mercury with a suction pump.

"Rinse mouth before taking a drink or eating. Have separate lockers for working clothes and street clothes, the latter in a mercury-free room. Eat a heavy meal before handling mercury and take a hot bath after the day's work.

"Wear a gas mask and rubber gloves, and work under a hood.

"Wash hands before eating and do not smoke or have food in rooms where there is mercury.

"Have dental and medical examinations at frequent intervals.

The writer candidly notes that "Many of these suggestions will not be followed." But he warns that "two points must be borne in mind: the first is that mercury volatilizes at room temperature, and secondly, the vapor is poisonous."

For "adequate ventilation and careful handling," specific and PRACTICAL recommendations include:

"Floors and tables should be smooth and free from cracks and recesses where mercury can lodge." (Consider placing a smooth surface under your mercury-handling area; asbestos, wood and glasscloth catch plenty of invisible droplets.)



"Where quantities are used, the author has found that working on a table top made of slats with a sloped tray below which drains into a bottle is a convenient arrangement.

"Spilled mercury should be collected with a vacuum suction bottle or a so-called 'mercury magnet,' which is a spiral of copper wire treated with nitric acid and then amalgamated. This will pick up even the tiniest droplet.

"Dry sweeping should be avoided. It is very little trouble to use sweeping compounds or to dampen the floor.

"It is impossible to clean off all the mercury from the average surface... When a cigarette was tapped before lighting on an apparently clean table, mercury droplets visible only under a microscope had been picked up by the tobacco.

"Since mercury cannot be completely removed mechanically, chemical washes have been suggested. A little caustic soda and sulfur in a gallon of water is effective to change the droplets to a non-volatile sulfide. Sulfur may also be mixed with the sweeping compound for the same purpose."

Now do you have a little more respect for that drop you roll into those argon tubes? If not, look up "Minamata" in your local library...

Since there are inexpensive detectors available to warn of vapor contamination, there's no reason why benders should risk poisoning themselves (and their unborn children). Ask for them at chemical supply houses.

INDUSTRIAL HEALTH AND HUMOR

Neon shop is no site for sore eyes

Nancy Hannmann is the proprietress of Neonically Speaking, Albany NY, and a frequent Neon News correspondent. This story about her eye injury will probably strike Three Stooges fans as a humor column, but it's intended as a cautionary tale for other benders. As grandma said in pre-contact-lens days, don't stick anything smaller than your elbow in your eye. (Or was it your ear?)

By Nancy Hannmann

I had my first serious injury a week ago Sunday. Well, first one since I've been in business. It was an eye injury. "Cornial abrasion" — and I thought my monthly menstrual cramps were bad! I've never experienced pain like I did with the eye injury. No, I didn't do it at work either. And of course, because of that, my customers were relatively unsympathetic.

I did it with a toothbrush. O.K., go ahead and laugh. I had applied mascara and was trying to get out the clumps left behind with an old toothbrush when I hit my elbow on the mirror and — WHAM, right in my eye.

It probably wouldn't have been a 3-day-in-bed ordeal, but I had to further abuse it by bending later in the day. When the heat from the fires hit that eye, I knew I'd done some damage to it. It ended up infected, swollen almost shut by the next afternoon, so I couldn't use either eye.

I did finally go to the doctors for them to patch it. They sent me home with eye goo, eye drops and drugs. The kill-the-pain-make-me-sleep-NOW-kind. Of course a wee bit of alcohol kicked in the NOW part nicely.

I didn't end up bending glass again-until the following Friday. Sum total of five straight days out of work. That little vacation cost me, I'll tell ya.

His curiosity piqued, Ted called Nancy and asked her some questions about this workman's peril:

Neon News: Explaining the mascara part to people must have been hard.

Nancy Hannmann: Yeah, well, it was. Especially my men customers just could not understand why in god's name I would comb my eyelashes out with a toothbrush. They're looking at me, going "They look fine to me" — you know, like the Head and Shoulders commercials...

NN: Did you consider lying to them?

NH: Oh yeah. A couple people I did, because it was just so bizarre. Like my father — I would've lied to him if he wasn't right there. He doesn't appreciate cosmetics anyways. He owns a sign shop and I do all his neon, so he wasn't really thrilled that I was in bed for three days.

Now the eye is very sensitive. I guess once you scratch your cornea you have to always be careful of it; it scars or something.

NN: Do you ever wear safety glasses when you're working?

NH: Sometimes I do. When it's really hot I can't stand it; they slide down my face and drive me crazy...

Wearing the safety glasses helped a bit, but it still hurt. It seemed that once the pain started, the only thing that would get rid of it was ice.

A lot of my customers were pretty pissed, but there's not a whole lot I could do about it. I mean, really, screw 'em. Do I have to cut my arms off or what? Come on!

And then of course after I got back they were looking at my eye, going "It looks fine to me," you know? Well, yeah, it looks fine to you, it oughta look fine, it's been five days. I almost felt like rubbing something in it just to make it red, you know: "Believe me now?!"

People are just really weird about it. If you work for yourself you're going to kill yourself before you can leave.

It's funny 'cause I've bent glass (while recovering from) every possible conceivable injury. I mean, sprained wrists and hurt back and legs and all kinds of things. If I have to do it, I can do it. But you can't do it without your eyes...

I did try to do it one-eyed. I drove twelve miles in here, patch on my eye (that was a trip), and I just had no depth perception whatsoever. I almost killed myself. I almost welded my wrists together. Whoa! It was interesting.

My girlfriend has one eye, and she's had one eye forever. She says 'Now you know how I feel.' But we had the two opposite eyes —

NN: Too bad you couldn't get together —

NH: We did, we did! Her left eye is glass, and my right eye was patched, and we went out drinking. All the people in the local bar know that Tam has one eye. So we were sitting side-by-side together, and I said, "Hey Tam, now we can both see what's coming."

You never say to her "Keep your eye on this for me" because she'll take it right out and put it on the bar. She's kinda crude about things like that. Scared the hell out of me the first time she did it...

(Names, from page 2)

Suzi Neon (Chicago)

The Tube Shop (Ft. Wayne, IN)

Thunder & Neon (LA)

Vulcan Neon (Providence, RI)

Write-On Neon Signs (Edmonton, Alta)

Zeon Signs (Albuquerque, NM)

Keep it simple:

Neon Street (Mequon, WI)

Neon Stuff (Salina, KS)

Neon Time (Morrisville, PA)

Neon Times (South Orange, NJ)

Neon To Go (New York)

Neon World (Baltimore)

So what are you then?

Notta Neon Light Co (Akron, OH)

And a personal favorite:

The Sign Asylum (Cincinnati)

Elegy for a lost sign

Writer Patricia Hampl recently won a five-year, \$250,000 grant to pursue her work, probably because she can wax lyrical on such matters as a neon brewery sign in St. Paul, MN.

Since the sign she praises has just gone dark for the last time (the brewery was sold and closed) and we remember it well, here's a toast to a huge red sign that warmed a lot of gray winter landscapes:

"From the St. Clair hill I looked down on ... the Schmidt brewery sign, mounted above the nineteenth-century brick factory, that spelled over and over, like an eternal one-word spelling bee, the name S-C-H-M-I-D-T in neon-red chancel-style letters. ...Hypnotized, I watched this sign for hours, for whole seasons.

...I liked everything about the sign — the way it was hoisted above the brewery which itself seemed to have been converted from a medieval monastery and whose dull orange brick made an appropriate mounting for the sign. I approved

too of the style of the letters: the faint overtones of a typeface not so different from the one in Gutenberg's Bible suited my literary taste: I was crazy to be literary. The red neon itself was a red both warm with homeliness and slightly hellish. This satanic quality was emphasized by the thick billows of steam that rose from the underworld of the fake-medieval brewery to the fiery crown of the inferno — the sign spelling out in its diadem its bit of intelligence in unbroken meter.

This meter was not tedious; it did not just beat on and on. It had a snap, it lived:

S-C-H-M-I-D-T (letter by letter)

pause

SCHMIDT (one great choral voice)

longer pause

S-C-H-M-I-D-T

and so, on and on.

I came almost every day to the park, sat on my bench, and watched this basic life-fact impose itself from the Schmidt Brewery sign, sending out its warm and hellish light in a trance I felt the world might be unaware of but to which it still must be responsive."

— from "A Romantic Education," by Patricia Hampl

(Kite, from page 1)

to bigger kites, and with the increased power of these you couldn't feel the tubes on there at all. These kites are extremely powerful. We went with the smaller tubes when we did that, trying to get them less breakable. That seemed to work somewhat. When they'd break, though, they'd still break the acrylic tubing.

NN: Did you have any problems with the transformers, or any of the electrical stuff?

MT: No we haven't, actually. I've heard from other people they've been having bad Tech 2000s, but ours have withstood many 70 mph crashes into the ground, and they've been rained on and everything, so they're working just fine. We combined the "midget" (a Tech 2000 model) with one of their flashing units, and we brought it to the Hawaii Stunt Kite Challenge, which was the big kite show.

We blew everybody away. They were using the small cellulume "glo-sticks" — actually there's several lighting-type systems out on the market now, using LED lights with mercury switches, which trigger the different colors when the kite turns a different way. These proved to be quite inferior to our "Wind Blast Neon Products"; this is our company name now.

It started out as a hobby, just a fun spectacular thing, but everybody liked it so much that there seems to be a small market to capture, and now we're producing these things.

NN: Have you got marketing under way now?

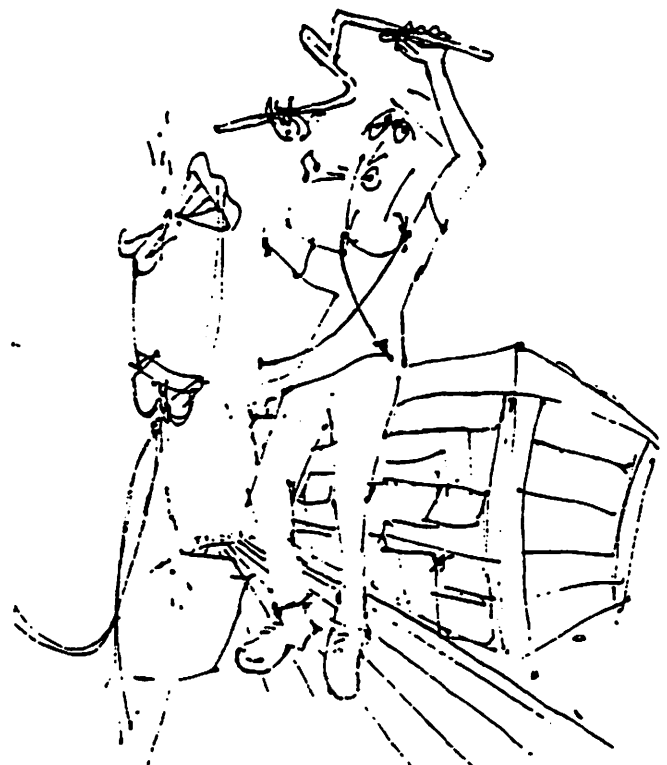
MT: Yes, the kites are being shown at Japanese kite festival right now. They were just at the American kite association convention in Oregon, and they've been shown all over -- Italy, New Zealand, Germany. We have a photo in Rudi Stern's new book too.

MT: We're also waiting for Tech 2000 — they said they were coming out with a combination "midget" and flasher in one.

NN: You mentioned too that the neon flasher will strobe?

MT: Yeah, that was amazing. That thing goes from very slow to a strobe-light effect. It's really neat darting through the sky when you set it slow, because you'll see it in one part of the sky, and then it'll shut off and then it'll be 70 feet the other way.

(see Matt, page 10)



Within days of putting the summer issue to bed, we received this drawing (which bears an eerie resemblance to Ted) from Trudy A. Pellegrino of New York, with this note:

"PLEASE FIND ENCLOSED A DRAWING OF A TUBE BENDER,
A TUNELESS WHISTLER
A SPACING PHILOSOPHER
A REASONABLE CONTRIBUTION TO HELP ENLIVEN YOUR
PAGES AND MAINTAIN VITAL SIGNS."

(We are still waiting to find out which signs are vital...)

Marching orders: Readers tell us where to go

Here are some of the more pungent and urgent responses to the survey we mailed out with resubscription forms. (We put some of the more specific technical queries into the Bulletin Board, to ask your help in chasing down answers.)

Readers asked for more color "(ya know like neon)"; more on pumping systems, benders' stories, equipment sources; neon history; "lighter side of neon — it is so typical"; more trouble shooting and how solved; some good pictorials; data on high-frequency drivers...

"War stories are the most entertaining... (wants to know more on) how neon is done outside the U.S. While on vacation we talked to a shop owner in Haarlem, Holland, who mentioned that tubes are coated after bending in Europe. We also noticed the bending style was often quite different — many sharp corners in the units we saw."

"A united effort to establish a national organization of neon tubebenders with the interest of shaping the quality of neon products manufactured as well as pushing for more innovative techniques and products..."

"Articles from benders who have seen many years in the trade... (also) I would like to see a small colored publication highlighting neon artists and their art."

"Do you know about the temp-sensitive crayons for marking glass when bombarding? Faber-Castell — great!"

OFFENDED: One philosopher answered the inquiry "Did any articles offend or disgust you?" with "Sometimes this is a means of communication." Others weren't as slow to boil:

"I feel that it is too bad that Joe Augusta gets ink when there probably are many people who could offer CONSTRUCTIVE advice on design, such as recommended

reading, etc. I guess it goes to show that neon light falls on assholes too."

"We will not be renewing our subscription due to the fact that we do not approve of the language in many of the articles you publish."

"Something about a bear being electrocuted..."

MISC.: "Ever notice Auld Lang Syne rhymes with neon sign?"

Fiery feedback: We had a lot of fiery feedback on Joe Augusta's "Deadly Neon" screed from the summer issue, but Richard Jenkins' comments over the phone were the most articulate and least scatological:

"I felt like he was taking pot shots at all the neon artists in Los Angeles ... kind of killing creativity in his neon students, instead of uplifting them."

"You gotta understand that all those things that he said are taboo — it's absolutely absurd. The point is that neon has traditionally always been a sign medium, and most people have images of signage in their minds, and that's a wonderful, fascinating aspect of neon. It's a commercial medium, and always has been."

"And those images he was saying 'Don't do, don't do, don't do, taboo, taboo, taboo,' are some of neon's most cherished things."

"I myself tell students in my classes 'you know, I'd rather get you to do creative things from within, and let go of all the sign images,' but not in a way where you didn't recognize them as important icons..."

"But on the other hand I love stuff like that — the kind of writing that gets your blood boiling."

Make magic wands for fun and profit!

Been feeling under the weather? Got the mercury blues? Maybe what you need are these "Adult toys for life," found in one of Hawaii's New Age marketing rags (the change-your-life-with-crystals crowd):

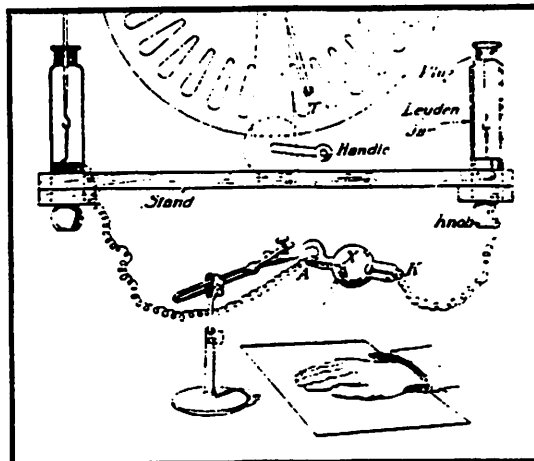
"BREAKTHROUGH TO PERFECT HEALTH

Attune Yourself to the Pulse of Life with
ELECTROMAGNETIC TOOLS FOR TRANSFORMATION

"At last, we have choices in creating Perfect Health that are quick, easy, predictable and affordable. Introducing state-of-the-art electromagnetic tools with gentle vibrational frequencies that provide a quantum leap in overall healing potential while addressing specific issues of mental and physical health."

"...The Ray-Tube Plus — Just now developed! The most advanced 21st Century version of the original Life-

Beam-Tube is here, complete with both electrode pads and the all new detachable Ray-Tube, which is portable and re-chargeable. Frequency Generators have been used successfully for over 50 years to devitalize and destroy harmful pathogens while enlivening normal healthy cells of the body into a new dimension of health. \$1197 — lowest price available.



"The T-Zapper — Powerful, versatile, hand-held Electro-Acupuncture with "pulsing-arc" scalar wave activation of meridian pathways in a quick and easy synthesized treatment routine. \$159.

"The BT-5 Brain Tuner — The ultimate in Neuro-Electric therapy ... for deep relaxation and relief from addictions and stress-related syndromes of insomnia, anxiety and depression, while enhancing memory, I.Q., vitality, immune-response, and total well-being. \$283 — lowest price available.

(in smaller type) "For experimental and educational use only. No medical claims are made or implied."

(Jenkins, from page 3)

I just lacked knowledge, and didn't know who to turn to for that knowledge.

Part 2: The Solution

One of the biggest problems in the neon industry as a whole is lack of knowledge. People are constantly making mistakes in pumping, bombarding, in installations, regulations, laws ... on and on and on. That was the single most important reason I started teaching: because people didn't know where to turn to get information.

My biggest frustration in neon is that there's a lot of closed, tight-lipped people who feel real threatened.

There is contradictory information out there, as in all things, but an educated person will make comparisons before they plunk down \$3,000 on a neon school, or \$4,000 on the latest manifold — and wouldn't it be great to call four people who feel they are experts on the subject, and compare notes?

In short: EXPERTS NEED EXPERTS.

I'm in love with my computer. In fact, I design many of my neon patterns on it. If you own or have ever used a computer, I'm sure you will agree they can be very complicated. Unlike the neon industry, many people who own computers belong to user groups, support groups of people who meet and share tips, techniques, and ideas. They're great fun and full of excitement.

In the back of my computer user group newsletter is an "expert list" of people who have special knowledge about software, hardware, printers, etc. If you have a problem, these experts freely give of themselves and try to help you out over the phone. They truly enjoy helping out, at no charge.

My biggest frustration in neon is that there's a lot of closed, tight-lipped people who feel threatened. Wouldn't it be great to call people who are experts on specialized aspects of the trade and compare notes?

What I'm getting at is this: I feel it would be extremely beneficial if the neon industry had its own "expert list" of people who are knowledgeable in the areas of pumping, bending, installations, codes, etc. These folks could lend a hand over the phone when a novice (or an old pro) encounters a problem they're not familiar with.

If others like the idea, the list could grow until every major area of neon has a few experts willing to help out. Here's my entry and, I hope, the start of a good idea:

"Richard John Jenkins / Neon in film production

(213) 662-6666 Call: Anytime

Specialties: Neon in temporary environments; film, video, corporate theater, pricing neon for film production, neon sound problems/electronic transformers, animation, shipping neon."

Of course, no one person has all the answers, including me. I research and compare products and services, and spend hours at the library before I make decisions about travel, buying things, etc. So if you want information on a new pumping system, it would pay to get the opinions of more than one expert before you made that purchase.

If you are a person who has specialized information about different aspects of neon, and would enjoy sharing your expertise with others, please drop a short description about yourself to The Neon News.

There has always been a lack of information-sharing in the neon industry. Please join me in expanding this communication — and become an expert!

Oh, and by the way: Anyone out there know why 7-watt bulbs burst next to flashing ruby red tubes?

(Richard, we have good and bad news for you. The good news is that we've found your experts for this technical quandary. The bad news is that they're both dead. See Page 4 book review.)

(Matt, from page 8)

NN: The heartiest recommendation of this whole phenomenon that I've heard is that BooBoo the dog sat entranced.

MT: Oh yeah. It got the BooBoo seal of approval. He actually sat and watched. He actually sat. It was quite a thing for that dog, who normally has to be moving and sniffing and doing something...

I've got a new kite now, the hottest one on the market, called "Revolution." It's a four-line stunt kite, and it'll travel at 60 miles an hour toward the ground and you can stop it an inch above the ground, hold it there, back it up and spin it into violent spins so fast the eye can't see.

But that's a very lightweight kite and the weight of the neon has been hampering it a bit. We're trying to figure out how we're going to do it.

I broke my other kite — I've got to get some replacement parts. We were camping out at Kualoa, and we were buzzing around at about midnight, just RRRRRR — these things are very loud — and

some crazy old man came out and started screaming at us so we put 'em away. But I busted it that night.

When there's several going at once it's pretty neat. I'd let Luke use a transformer, and then I had mine, and Jed's got one too.

We had them all up at the kite show, they had this "magic in the sky" advertised on the radio 'cause they were giving away the free light sticks, and there were people out there with like 20 light sticks on their kites.

And I had these two pieces of hot pink, "purple" pumped neon, probably 2-1/2 feet long on each side and I had the "midget" with the whole big "midget controller" that I used — that thing was just huge. I had a lot of hardware on there.

The thing was strobing, and Jed had his up and Luke had his up and the people just shit. It was amazing.

Matt Thompson, when not bending by day or flying at night, can be reached at 345 N. Kainalu Dr., Kailua, HI, 96734 (808) 261-2716

THE LIGHTER SIDE OF NEON

Study today for an electrifying tomorrow!

By Audie Foote

Are you thoroughly disgusted with your present job or occupation? Do you see your career going NOWHERE?

Well, welcome to the party, pal!

That's why you should LEARN HOW TO MAKE NEON! That's right, enroll now in LEON'S SCHOOL OF NEON, and in TWO WEEKS or less, using tools and materials found right in your own home, you too can learn the delicate and forgotten art of tubebending!

Just two weeks or less, and you'll be lighting up your own home with those beautiful, colorful (and sometimes flickering) neon tubes that you see on TV commercials, rock videos, motion pictures, and of course the always-popular strip shows and adults-only theatres.

There's a FORTUNE to be made in bending and blowing your own glass, and LEON'S SCHOOL OF NEON will show you how — in the privacy of your own home!

Don't let anyone tell you it takes five years or more to learn how to make and pump neon. We'll teach you, with our easy-to-follow booklet and video entitled "DON'T BE A PEON — LEARN NEON WITH LEON!"

Yes! Leon P. Dingle, master neon craftsman (with nearly six months of experience) will demonstrate all the tricky moves and techniques that have propelled him to the top of the industry, not to mention the national exposure he received

on "America's Most Wanted."

Imagine! Using equipment found in your own home, like kitchen range and vacuum cleaner, you can make your own neon flamingos and palm trees! Or how about your own bare-breasted animated dancing cowgirls? Anything's possible — even your own initials!

And if you call right now, we'll include, free of charge, your own STARTER KIT! which contains much of what you'll need when you first receive this amazing home study course — like a Bic lighter, file, Band-aids, gauze, tourniquet, fire extinguisher, asbestos face mask, gas mask, fireman's axe, and a lifetime supply of aloe gel!

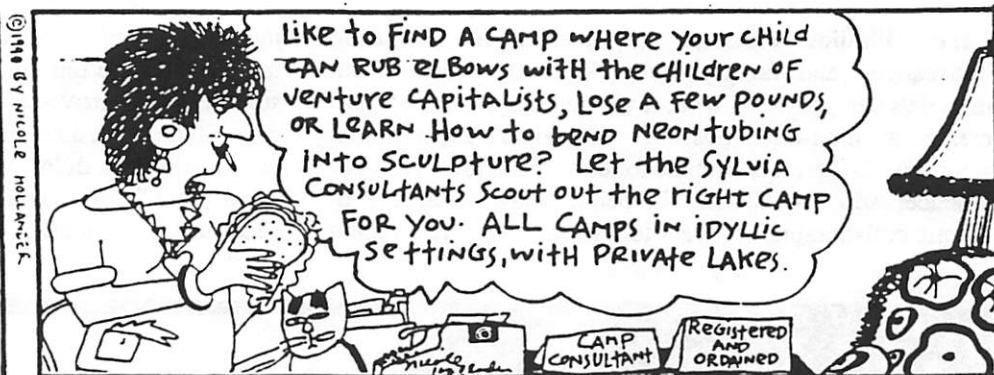
Just send \$4,000 (payable in advance only) or call 1-(800) HI-VOLTS. Please have several major credit cards and the deed to your house ready. Leon is waiting to take your call personally so he can get you started on a career that will just BLOW YOU AWAY!

Call 1 (800) HI-VOLTS now, and remember, DON'T BE A PEON, LEARN NEON WITH LEON!

Neon! It's a gas!!

Editor's note: Audie Foote is now regularly contributing to a syndicated radio humor service — so don't be surprised if you hear this issuing from your car dashboard someday. And don't call us if the toll-free number doesn't work for you!

Sylvia by Nicole Hollander



This butt's for you (or, signpainters break neon too)

It was about a 3-by-4-foot neon window sign, a \$750 sign, in a clear plastic box. Somebody brought it into the office to get it ready, and laid it down on the couch.

And since it was in a clear box, our signpainter didn't see it when he came walking in saying "Hi, how you doing there."

I had my back turned and before I could turn around he plopped

his ass down and just sat all over the whole damn thing. Broke the whole sign — you hear all these tubes going pop-pop-pop-pop-pop, pop. One fell swoop.

A regular neon circus we got — one guy's throwing it up in the air (when touching leads), another guy's sitting on it, and me, I'm throwing it against the wall.

-- Audie Foote

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The Neon News welcomes stories, artwork, ideas, letters, suggestions, irate comments and anything else you can think of. The editors make no pretense to be experts in the field; the newsletter is intended as a forum where neon folks can exchange ideas and information.

BULLETIN BOARD

NEON SIGN COLOR POSTCARDS: Pontiac Indian, Buster Brown, Mobilgas Flying Horse, Simple Simon, etc. Fifty cards for \$13.50. Davidson, 860 North 26th Street, Philadelphia PA 19130. (215) 232-0478.

Help wanted: recent neon school graduate or journeyman bender for San Jose CA shop. Call Swan Signs, (408) 280-1035.

Design expert and writer Vilma Barr is writing an ALL-COLOR! book called "The Best of Neon" focusing mostly on contemporary neon; she welcomes photos, slides and information (preferably before mid-November). Send to her c/o Business and Professional Editorial Services, 10 E. 23rd Street, 7th floor, New York, NY 10010

Rudi Stern's new book, Contemporary Neon, is out and available from Signs of the Times for \$49.95.

Michael Harms of Scottsdale AZ asks: "I was wondering if anybody makes a small jelly bean (effect) transformer. Tech 2000 in California has stopped production on them and doesn't plan to make them anymore."

At the Museum of Neon Art (MONA) in Los Angeles: "Graven Images," by Maurice Gray, until January 5. Showing also is "Totems and Towers," a group show by ten artists.

Larry Phillips indicated an interest in producing "surrealistic and fantasy" artworks with neon: "What materials can you work with, if any, mixing it with neon to create a high-tech possibly functional experimental sculpture? Is there any demand for that type of art?" He's not a bender, so if any Upstate NY benders have an interest in artistic collaboration (or want to flash him your fabrication

prices), contact him at 709 S. West Street #4, Syracuse NY 13202.

Audie Foote, Neon News columnist, wonders if "any other ESPN Sportscenter watchers out there are noticing the growing mercury stains and/or snaking in the bromo-blue set?"

Here are some specific inquiries culled from our reader surveys (sent out to those due for sub renewal); we will try to address these in future issues, so call us or drop a line if you have ideas, opinions or advice:

A pile of questions from "a rookie bender": "Does Neoncolor really work? Whose blue mercury stains less? Who manufactures clear tubing other than neon suppliers? How to coat tubing yourself? Annealing. Drop splices. Spirals. Three-dimensional bending technique. Accessories for bending: transformer bases, mounting, etc. High frequency — lights with only one electrode."

"More information on the new electronic transformers for commercial/residential applications. Cover N.E.C. codes on residential neon applications; many (benders) are unaware of ramifications."

"More relating to U.L. and neon."

"Comparison of classic colors (quality of glass) from manufacturer to manufacturer."

Brian Nichols of Nix Neon, St. Paul MN relayed an interesting story — he went to a job site where they were taking down the old neon, border tubes going around the store. When he arrived all the neon was down, but the power was still on. He asked the (obviously unfamiliar with neon) people why they didn't turn it off and they said "we didn't know how." He couldn't believe it. "Didn't you get shocked?" "Oh, not too much."

THE NEON NEWS
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